Ethics and Computer Science (An initial collaboration between Philosophy and Computer Science at Lewis & Clark College)

i. Ethics and CS is a new, emerging area of study. We are trying to build something here at Lewis & Clark College.

ii. Professor Martinez introduces cases to think about and ACM Code of Ethics

iii. What is Ethics all about?

Ethics concerns human beings living worthwhile, or valuable, lives. What is a good human life?

Ethics concerns *values.* Examples: Happiness vs. Suffering, Nature, Art, Literature, Freedom, Equality, Intelligence, Knowledge, etc….

Worthwhile human lives are ones that embody positive values.

Theoretical Ethics: Theory of Good/Value & Theory of Right/Obligation

Practical Ethics: Rigorous answers to how we should act in this or that situation

iv. Ethics and Technology

Why do we have technology? Arguably, to make our lives better. So we can live worthwhile lives (i.e. lives the embody the values mentioned above).

Technology shapes *how* human beings seek to live worthwhile lives. Technologies are not ethically neutral. *How* we build things reflects our values.

CS and Ethics: the speed, scale and technical expertise of CS is transforming the ethical landscape of our world. (Law can't keep up, the technologies are across borders, and legislators typically don't have the expertise.)

So, those with the expertise should think about ethics.

v. Two (big) examples:

1. Face- and voice-recognition algorithms can now be used to track and create a lasting digital record of your movements and actions in public, even in places where previously you would have felt more or less anonymous. There is no consistent legal framework governing this kind of data collection, even though such data could potentially be used to expose a person's medical history (by recording which medical and mental health facilities they visit), their religiosity (by recording how frequently they attend services and where), their status as a victim of violence (by recording visits to a victims services agency) or other sensitive information, up to and including the content of their personal conversations in the street. What does a person given access to all that data, or tasked with keeping it secure, need to understand about its ethical significance and power to affect a person's life?

2. 21st century technologies are reshaping the global distribution of power, justice, and responsibility. Companies such as Facebook, Google, Amazon, Apple, and Microsoft are now seen as having levels of global political influence comparable to, or in some cases greater than, that of states and nations. In the wake of revelations about the unexpected impact of social media and private data analytics on 2017 elections around the globe, the idea that technology companies can safely focus on profits alone, leaving the job of protecting the public interest wholly to government, is increasingly seen as naïve and potentially destructive to social flourishing. What moral obligations do these companies have? How can these companies best help humans live worthwhile lives?

vi. Ethics Module 1

1. **Read the Case on Data, Education, Privacy and Research at https://www.scu.edu/ethics/focus-areas/internet-ethics/resources/students-and-sensors-data-education-privacy-and-research/**

2. **Divide into: Dean of College, Faculty Advisor, Student at the University, Prospective Student**
3. **Each take 10 mins to think about two things. First, what are the main concerns of someone in your role? If you need to do some research (e.g. Dean's, you might have to look up what the Dean of the College is supposed to do), you can look it up online. Second, after thinking about your role, imagine occupying that role and think, from your role, whether and how this technology should be used. Write down some thoughts for yourself.**
4. **Begin with the Dean of the College: Take 2 mins and simply tell the others what your decision is. Do not tell them why it is your decision.**
5. **All other roles: Take 2 mins and think about how you would respond to the Dean's decision. Would take any actions? What are your thoughts?**
6. **Student at University: Your response and why**
7. **Prospective student: Your response and why**
8. **Faculty Advisor: Your response and why**
9. **Dean: Explain to the others *why* you made the decision you did**

Deans: How many decided to use the technology?
How many decided to use the technology with some degree of restrictions on it?
How many decided not to use the technology?

Questions for the group: How did hearing from the other roles change your mind about your decisions? Were there other options for the Dean? Were the other options for responses to the Dean?

Discussion?

vii. Going Deeper Into the Study of Ethics:

General Approaches:

Principle Based vs. Advisor Based vs. Cases/Precedent/Casuistry

Each Approach contains a vast number of more specific theories with lots of content.

What's the point of an ethical theory?

From a practical perspective: Offer a person many tools so one is not left with only "gut reactions" or their upbringing or the morality of their workplace/profession.

a. Sometimes simply articulating what values are at stake and what options are available is a huge step towards making a good decision. (We don't aim for perfection, but doing as best as we can in the circumstances.)

b. Sometimes (more often than not?) there will be one or two obviously good answers.

c. Knowing why you do what you do can be important when we assess moral, legal, institutional responsibility. You are less at fault if you have articulated why you are doing what you are doing, even if you made a mistake.